

## APPROACHES TO ASSESSING THE MINIMUM SUFFICIENT LEVEL OF FINANCIAL INDEPENDENCE OF THE ORGANIZATION

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**Abstract:** The coefficient of financial independence is an important indicator characterizing the level of financial stability of the organization. It reflects the level of use of own funds by the company to carry out its activities. This indicator is also an important analytical tool for investors, creditors and management personnel, as it helps to assess the level of risk associated with the company's financial policies and its ability to ensure financial stability in the long term. The article proposes a new approach to assessing the minimum necessary amount of equity capital for the organization and the sufficient (smallest) level of the coefficient of financial independence based on it.

**Keywords:** financial stability, financial independence, equity capital concentration ratio, financial independence ratio, minimum required equity capital, financial independence reserve

**JEL code:** M40

**Research aims:** explore new possibilities for assessing the financial independence and autonomy of organizations.

**Research novelty:** a new methodology for evaluating the financial capacity of organizations' independence was proposed.

## Introduction

The coefficient of financial independence is an important indicator characterizing the financial condition of the organization, and in particular the level of financial stability. The authors consider that "financial stability" coincides with the concept of "financial independence" and is characterized by a number of indicators (Kurilova, A. A. 2014). In the professional literature, there is also an opinion, that the financial stability of the enterprise is characterized by two categories: financial independence and solvency (Grachev A. V. 2006). The financial stability of the company is characterized as "a certain state of the company's accounts, which guarantees its constant solvency" (Sheremet A.D. 2009).

Financial stability implies the ability of the enterprise to maintain the actual or target financial structure over a long period of time. Notes, that financial stability in the long run is characterized by the ratio of own and borrowed resources. "It depends above all on the general financial structure of the enterprise, the degree of its dependence on creditors and investors" (Kovalev V. V. 2011).

Defines financial stability as "guaranteed solvency, independence from random structural changes of the market and the behavior of partners" (Grachev A. V. 2006), considering main indicator to be the presence of net liquid assets, which, according to the author, is the difference between liquid assets and short-term urgent liabilities (Efimova O. V., Melnik M. V. 2007).

A more specific consideration of financial stability is also proposed, noting that "the financial stability of an economic entity is the state of its monetary resources, which ensure the development of the enterprise mainly at its own expense, maintaining sufficient solvency and creditworthiness, under conditions of minimal entrepreneurial risk" (Bocharov V. V. 2009). This definition reflects a conservative approach to financial policy in the enterprise.

An opinion is presented that "Financial stability of an enterprise is the ability of a business entity to operate and develop in a changing internal and external environment, to maintain the balance of assets and liabilities, which guarantees its solvency and investment attractiveness in the long term, within the limits of the permissible level of risk" (Savitskaya G.V. 2009). In this regard, the development of new approaches to the assessment of financial independence of organizations is important.

### **Research results**

A comprehensive index characterizing financial stability is the coefficient of independence. Basically, there are two types of independence ratio: equity concentration ratio and independence ratio. The choice of this or that factor in the practice of financial analysis depends on the analyst's preference (Kreynipa, M. N. 1998).

In the practice of financial analysis, the following standards of sufficient levels of equity capital concentration (Financial independence) and financial independence ratios have become widespread:

Equity/(Balance sheet total)  $\geq 0.5$ ;

Equity/(Debt capital)  $\geq 1$

The logic of setting the minimum level of the equity-borrowed capital (Financial Independence Ratio) ratio to 1,0 is based on the following: if all creditors demand their funds at the same time, then the organization, realizing its assets, will be able to pay off its obligations while maintaining ownership of the organization. This statement can be countered in the sense, that equity is not equivalent to the amount of money used to pay off liabilities.

Essentially, equity capital is invested in various assets that have varying levels of liquidity. This means, that the organization's ability to repay liabilities directly depends on the structure of assets, that is, the degree of liquidity of assets. In organizations with different asset structures, the permissible ratio of equity and borrowed capital is different. To assess financial stability, first of all, it is necessary to calculate the minimum necessary amount of equity capital to ensure financial stability. Equity characterizes the total value of funds owned by the enterprise, which is used to form a certain part of the assets (Kurilova, A. A. 2014).

Determining the necessary (sufficient) amount of equity capital for a specific organization in the current period is based on the requirement of the accepted rule of financial management. In order to ensure an acceptable level of liquidity and financial stability. It is necessary that the organization can finance the most illiquid assets at the expense of its own funds. This means, that the

formula for calculating the minimum necessary (sufficient) amount of equity capital will look like this:

$$\text{Minimum required equity (MRE)} = \text{Most unilliquid assets} \quad (1)$$

The problem here is determining the size of the most illiquid assets, because different branches of the economy, even different enterprises of the same branch, differ in the structure of assets. In this sense, in the case of internal financial analysts of each organization should classify assets according to their liquidity level and separate the most illiquid assets. In the case of external financial analysis, analysts do not have such an opportunity, and in this case, we suggest that non-current assets, material stocks, unfinished production and given current advances be classified as the most illiquid assets.

By comparing the minimum necessary amount of equity capital determined by the calculation procedure with the actual amount of equity capital, conclusions can be drawn regarding the adequacy or insufficiency (deficit) of equity capital in the given organization.

Thus, the necessary minimum amount of equity capital to ensure financial stability can be calculated by the following formula:

$$\text{Minimum required equity capital} = \text{Most illiquid assets} + \text{Non-current assets} + \text{Material inventories} + \text{work in progress} + \text{Current advances made} \quad (2)$$

Calculating the minimum required amount of equity capital enables determining the maximum allowable amount of borrowed capital magnitude as follows.

$$\text{The maximum allowable size of borrowed capital} = \text{Actual total of the balance sheet} - \text{The most illiquid assets that must be financed of equity capital.} \quad (3)$$

or

The maximum allowable amount of borrowed capital = Actual total of the balance sheet - The minimum required amount of equity capital. (4)

The sufficient level of the independence indicator is calculated as the ratio of the minimum required amount of equity capital to the maximum allowable amount of borrowed capital.

Equity minimum /Debt capital maximum (5)

In order to calculate the sufficient (minimum) level of the equity capital concentration ratio, it is necessary to relate the minimum required amount of equity capital to the actual amount of assets (the balance sheet total).

Equity minimum/Total of the balance sheet (6)

It is necessary to compare the calculated satisfactory (minimum) levels of the coefficients with their actual levels. On the basis of that comparison, conclusions can be made about the sufficient or insufficient level of financial stability of the organization.

It should also be noted that the difference between the actual and satisfactory (minimum) levels of the coefficients provides particularly important analytical information. In essence, the positive value of this difference can be called a reserve of financial independence, and the negative value can be called the level of financial dependence. If the actual size of the coefficients decreases in dynamics, but the difference between their actual and sufficient (minimum) levels remains unchanged, it can be said that the level of financial stability of the organization does not change.

An increase in the specific weight of equity capital, other things being equal, can lead to a decrease in the level of return

on equity capital. The question here can be formulated as follows: if the result of financial leverage is positive, is there a limit beyond which the share of borrowed capital cannot be added to the total amount of liabilities?

In the case of a positive result of financial leverage, borrowed capital can be increased as long as this increase does not threaten the financial stability of the organization and the safe level of the organization's dependence on external sources. In other words, this increase is permissible within the limits of the financial independence reserve of the organization.

By ensuring the necessary level of financial stability, the organization can allow a progressive rate of growth of borrowed funds compared to the growth rate of equity capital (if the cost of borrowed funds is lower than the level of profitability of equity capital), thereby contributing to the growth of the volume of production activities and the level of profitability of capital.

Let's note once again that we are talking about the percentage of equity, not the absolute amount. A decrease in the absolute amount of equity capital is definitely unacceptable and characterizes the organization's activity from a negative point of view.

If the organization does not provide an acceptable level of financial stability, how can it affect its financial position? Arguments are often heard that in organizations with a favorable position in the market, a significant excess of the ratio of borrowed funds compared to equity is sometimes observed, and at the same time these organizations do not have problems. As we have already mentioned, financial stability is the characteristic of maintaining the solvency of the organization not at the given moment, but in

the future (the solvency level of the organization at the given moment is characterized by liquidity ratios).

Therefore, organizations with a low level of financial stability may not have problems with repaying their obligations in the current period. Problems arise during fluctuations in the financial market and in crisis situations. In the conditions of the global economic crisis, the first to have problems were organizations with a low level of financial stability.

The reasons for the deterioration of the coefficients characterizing the level of financial stability and the levers for their improvement (optimization) are obvious. As we mentioned, the equity capital concentration ratio (financial independence ratio) reflects the level of the organization's dependence on borrowed capital (total equity/liabilities) and is determined by the evaluation of the organization's performance in the long term. From the point of view of the long-term perspective, long-term and short-term liabilities cannot be separated in terms of the need for repayment, because they have to be paid sooner or later.

For this reason, the total amount of borrowed capital is considered in the assessment of financial stability, in contrast to the analysis of liquidity, where long-term liabilities are equated with equity capital, since they are not required to be repaid in the near future.

If we replace the sum of liabilities with the sum of assets in the declaration of the above formula, it becomes obvious that the decrease in the level of equity capital concentration ratio is the result of the progressive growth of assets compared to the growth of own sources of financing, which leads to the inevitable increase of borrowed funds.

## Conclusion

Thus, the reasons for the increase in the share of borrowed sources of financing and which lead to a decrease in the level of the equity capital concentration ratio are as follows:

1. Reduction of equity capital. It may be due to losses, significant dividends declared (declining retained earnings), asset accounting impairment (decrease in value from previous revaluation of non-current assets), or slow equity growth due to low profitability or a small proportion of retained earnings (self-financing). Low level.

2. Capital investments, the size of which exceeds the growth of own sources of financing in the same reporting period (growth of non-current assets exceeding growth of equity capital).

3. An increase in the amount of current assets that exceeds the increase in the amount of equity capital, which may be due to the following circumstances:

- ✓ increase in production volumes, in which case the increase in current assets is inevitable;
- ✓ and/or a slowdown in current asset turnover.

In order to ensure a sufficient (minimum) level of independence, it is necessary that the growth of the maximum illiquid assets does not exceed the amount of the growth of the organization's own capital, taking into account the difference between the actual and the maximum allowable amounts of borrowed capital of the previous period.

Growth of the most illiquid assets (non-current assets + most illiquid current assets)  $\leq$  Increase in the amount of equity capital + actual amount of borrowed capital of the previous year - maximum allowed amount of borrowed capital of the previous year (7).

If the organization does not have a reserve of financial stability, on the contrary, there is a certain level of financial dependence, then the formula will be modified as follows:

Growth of the most illiquid assets (non-current assets + most illiquid current assets)  $\leq$  Increase in the amount of equity capital - the actual amount of borrowed capital of the previous year + the maximum allowable amount of borrowed capital of the previous year (8).

Essentially, such calculations make it possible to carry out a predictive analysis aimed at improving the structure of assets in order to restore or maintain the level of financial stability.

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## **ԿԱԶՄԱԿԵՐՊՈՒԹՅԱՆ ՖԻՆԱՆՍԱԿԱՆ ԱՆԿԱՆՈՒԹՅԱՆ ՆԿԱԶԱԳՈՒՅՆ ԲԱՎԱՐԱՐ ՄԱԿԱՐԴԱԿԻ ԳՆԱՀԱՏՄԱՆ ՄՈՏԵՑՈՒՄՆԵՐԸ**

### **Վահե Միքայելյան**

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**Բանալի բառեր** - ֆինանսական կայունություն, ֆինանսական անկախություն, սեփական կապիտալի կենտրոնացման գործակից, ֆինանսական ինքնուրույնության գործակից, նվազագույն անհրաժեշտ սեփական կապիտալ, ֆինանսական անկախության պաշար

Կազմակերպության ֆինանսական կայունության մակարդակը բնութագրող կարևոր ցուցանիշ է ֆինանսական անկախության գործակիցը: Այն արտացոլում է իր գործունեությունն իրականացնելու համար ընկերության կողմից սեփական միջոցների օգտագործման մակարդակը:

Այս ցուցանիշը նաև կարևոր վերլուծական գործիք է ներդրողների, պարտատերերի և կառավարող անձնակազմի համար, քանի որ այն օգնում է գնահատել ընկերության ֆինանսական քաղաքականության հետ կապված ռիսկի մակարդակը և երկարաժամկետ հեռանկարում ֆինանսական կայունությունն ապահովելու նրա կարողությունը: Հոդվածում առաջարկվում է կազմակերպության համար սեփական կապիտալի նվազագույն անհրաժեշտ մեծության և դրա հիման վրա ֆինանսական անկախության (ինքնուրույնության) գործակցի բավարար (նվազագույն) մակարդակի գնահատման նոր մոտեցում:

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